

BOOK REVIEW

Seventh Catalog of the Vascular Plants of Ohio by Tom S. Cooperrider, Allison W. Cusick, and John T. Kartesz, eds. 2001. x + 195 pp. illus. map. ISBN 0-8142-5061-0 \$29.95 (softcover); ISBN 0-8142-0858-4 \$65.00 (hardcover). Ohio State University Press, Columbus, OH.

The *Seventh Catalog of the Vascular Plants of Ohio* augments major works published since 1961 that focus on Ohio vascular plants (Andreas 1989; Braun 1961, 1967; Cooperrider 1995; Cusick and Silberhorn 1977; Fisher 1988; Weishaupt 1971). Tom Cooperrider first conceived of the new catalog in 1960; in the 1970s and 1980s he drafted a preliminary checklist and began planning the *Seventh Catalog*. John Kartesz independently prepared a preliminary checklist for Ohio, and in 1994 suggested that he and Cooperrider combine their efforts. Five additional contributors were enlisted to help compile the *Seventh Catalog*. Included among the seven authors are some of Ohio's foremost floristic botanists of today.

There has been profound need for the *Seventh Catalog*. A period of seventy years has elapsed since publication of Schaffner's (1932) catalog of Ohio vascular plants. Since then, many taxa have been discovered to occur in Ohio, and marked changes have been made in taxonomy and nomenclature. The *Seventh Catalog* reflects these developments.

According to the Statistical Summary of the *Seventh Catalog*, Ohio has 2716 species of vascular plants and 139 interspecific hybrids: 108 pteridophytes, 17 gymnosperms, 1994 dicotyledons, and 736 monocotyledons. An additional 143 infraspecific taxa are also listed. Approximately 34% of species, 17% of interspecific hybrids, and 17% of infraspecific taxa are alien to Ohio.

The *Seventh Catalog* has nine main parts, numbered here for convenience: (1) Introduction, (2) Natural History of the Ohio Flora, (3) Catalog of Vascular Plants, (4) Appendix 1: Statistical Summary, (5) Appendix 2: Deletions, (6) Literature Cited, (7) Index to Scientific Names, (8) Index to Common Names, and (9) Contributors. Authors include Tom Cooperrider (Part 1) and Guy L. Denny and Cooperrider (Part 2). Part 3 has four main sections: Pteridophytes (Allison Cusick), Gymnosperms

(Cusick), Dicotyledons (Cooperrider, John J. Furlow, and Cusick), and Monocotyledons (Barbara K. Andreas, Cooperrider, Cusick [Cyperaceae], and John V. Freudenstein [Orchidaceae]). Authors are unspecified for Parts 4–9, which represent joint contributions.

The actual Catalog of Vascular Plants (Part 3; 79 pages) is the major part of the book. The nomenclature, circumscription, and sequence of suprageneric taxa are based on Cronquist (1981), Gleason and Cronquist (1991), and/or Flora of North America Editorial Committee (1993, 1997). Nomenclature and circumscription of taxa below the rank of family follow unspecified sources. Genera, species, and interspecific hybrids are listed alphabetically within families. The following information is given for each species or hybrid: Latin name and author(s); status as native, naturalized, or adventive (or otherwise not established in the flora); and common name. Provided for selected taxa are synonym(s) and sometimes additional information crucial for understanding circumscription. Varieties are given for some species. Interspecific hybrids are listed by the hybrid name, if available [e.g., *Asplenium* \times *inexpectatum* (E. L. Braun ex Friesner) C. V. Morton], followed by parentage (e.g., *Asplenium rhizophyllum* \times *A. ruta-muraria*). No illustrations or keys are provided, although they are nonessential for this work.

Clearly, great effort was required to compile this *Seventh Catalog*. In addition to the numerous taxonomic and nomenclatural decisions involved, I know personally that Tom Cooperrider was determined that listed taxa be correctly identified. Comparison of Cusick's treatment of Ohio pteridophytes (Part 3 of the *Seventh Catalog*) with that of Weishaupt's (1971) *Vascular Plants of Ohio, Third Edition* exemplifies the extent of contribution of the *Seventh Catalog* in updating available resources. First, Cusick's study resulted in the listing of 87 species and 21 hybrids, compared with Weishaupt's 70 species and 2 hybrids; this includes the deletion of four species and one hybrid. Second, Cusick's list reflects the considerable changes in pteridophyte nomenclature since 1971 (following Kartesz 1994). Among the many examples that could be given here: he listed eight families in place of the more broadly circumscribed Polypodiaceae; the four currently recognized genera (*Diphasiastrum*, *Huperzia*, *Lycopodiella*, and *Lycopodium sensu stricto*) in place of *Lycopodium*; and the three currently recognized genera (*Athyrium sensu stricto*, *Diplazium*,

and *Deparia*) instead of the more broadly circumscribed *Athyrium*. Assembly of the *Seventh Catalog* must have demanded extensive research, meticulous organization, and, ultimately, intensive and prolonged proofreading.

The *Seventh Catalog*, however, has two unfortunate deficiencies. There are no indications of which taxa and how many taxa are newly added to the known flora of Ohio. Thus, considerable burden is placed upon users to extrapolate this information from additional sources. In contrast, Cusick and Silberhorn (1977) provided a list of such taxa. Neither voucher specimens nor herbaria are cited for any of the listed taxa; this would have been especially desirable for new Ohio records. Thus, any misidentifications, however improbable their existence, are likely to go uncorrected for years to come. In contrast, for rare Ohio species Andreas (1989) and Cusick and Silberhorn (1977) cited voucher specimens and herbaria.

It is also surprising that some taxa listed for Ohio by Kartesz and Meacham (1999) are neither included in, nor listed as deletions from, the *Seventh Catalog*. Examples include *Alopecurus geniculatus*, *Cardamine* \times *maxima*, *Phellodendron amurense*, and *Tagetes patula*. One wonders if authors of these two works, respectively, employed different standards of proof for the occurrence of taxa within Ohio.

A minor complaint relates to the nonalphabetical organization within the *Seventh Catalog* of taxa of higher rank, particularly of orders and families. Readers unfamiliar with Cronquist's (1981) system may have difficulty locating taxa. More efficient would have been a strictly alphabetical listing of families, as was provided by Andreas (1989). One recalls favorably the strictly alphabetical arrangement of taxa within Swink and Wilhelm's (1994) *Plants of the Chicago Region*, a feature contributing substantially to that volume's ease of use.

Overall, however, the *Seventh Catalog of the Vascular Plants of Ohio* represents a most welcome and necessary contribution for persons seriously interested in the Ohio flora. As indicated earlier, reference to the *Seventh Catalog* reveals that the most recent manual of Ohio vascular plants (Weishaupt 1971) is very out-of-date. One hopes that among Ohio's floristic botanists there are or will be one or more individuals who will properly revise Weishaupt's standard work.

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